

REMARKS

In response to the final office action mailed on March 13, 2007, Applicants amended claims 1, 9, and 10. Claims 1-7, 9-12 and 14-22 are presented for examination.

The Examiner rejected claims 1-7, 9-12, and 14-22 under 35 U.S.C. § 103(a) as being obvious over Camaioni et al., Journal of Materials Chemistry, The Royal Society of Chemistry, 2002, pp. 2065-2070 ("Camaioni") in view of Brabec et al., 1999 Material Research Proceedings Symposium BB, MRS Fall Symposium ("Brabec").

As amended, claims 1-7 and 20-22 cover methods that include heating a photovoltaically active layer having a polyalkylthiophene or a polymer comprising a polyalkylthiophene to at least 70°C. Camaioni discloses that a significant improvement of the device performance could be achieved after a mild thermal treatment of the photovoltaic cells. See, e.g., the Abstract. In particular, Camaioni discloses in one example that a PHT-3 cell showed such an improvement after being heated at about 55°C. See page 2068, right column, second paragraph. However, Camaioni does not disclose or suggest heating a photovoltaically active layer having a polyalkylthiophene or a polymer comprising a polyalkylthiophene to at least 70°C, as required by claims 1-7 and 20-22. Indeed, given that Camaioni teaches that heating a photovoltaic cell at about 55°C results in a significant improvement of the device performance, one skilled in the art would not even have been motivated to modify Camaioni to provide the methods covered by claims 1-7 and 20-22.

Brabec describes heating a photovoltaically active layer containing a phenyl-substituted polythiophene to 100°C. See the Experimental section. It does not disclose or suggest heating a photovoltaically active layer having a polyalkylthiophene or a polymer comprising a polyalkylthiophene to at least 70°C, as required by claims 1-7 and 20-22. In other words, Brabec does not cure the above deficiency in Camaioni.

Thus, claims 1-7 and 20-22 are not obvious over Camaioni in view of Brabec.

As amended, claims 9-12 and 14-19 cover methods that require contacting a photovoltaically active layer having a polymer comprising a polyalkylthiophene with a solvent vapor. Camaioni describes thermally treating a photovoltaically active layer. It is entirely silent on treating a photovoltaically active layer with a solvent vapor, let alone contacting a

photovoltaically active layer having a polymer comprising a polyalkylthiophene with a solvent vapor, as required by claims 9-12 and 14-19.

Brabec again does not cure the above deficiency in Camaioni. Brabec mentions treating a phenyl-substituted polythiophene with a solvent vapor. See, e.g., the Abstract. However, it does not disclose or suggest contacting a photovoltaically active layer having a polymer comprising a polyalkylthiophene with a solvent vapor, as required by claims 9-12 and 14-19. Further, Brabec teaches that "[t]reating the thin films with solvent vapor was found to give less complete ordering." See the Results and Discussion section; emphasis added. In other words, it suggests that treating a photovoltaically active layer with a solvent vapor is less desirable than a thermal treatment. Thus, in view of Brabec, one skilled in the art would not even have been motivated to modify the methods disclosed in Camaioni with the methods disclosed in Brabec to provide the methods covered by claims 9-12 and 14-19.

Thus, claims 9-12 and 14-19 are also not obvious over Camaioni in view of Brabec.

In sum, neither Camaioni nor Brabec, alone or in combination, discloses or suggests the methods covered by claims 1-7, 9-12, and 14-22. There is no suggestion to combine these two references to provide such methods. Even if these two references were combined, the result would not be the methods covered by claims 1-7, 9-12, and 14-22. Accordingly, Applicants request reconsideration and withdrawal of this rejection.

Applicants believe the application is now in condition for allowance, which action is requested. Please apply any other charges to deposit account 06-1050, referencing Attorney's Docket No. 21928-006US1.

Respectfully submitted,

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Tony Zhang
Reg. No. L0256

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906
21639696.doc